

## CHAPTER 5: COLLABORATIVE EFFORTS ON PBTS WITH TRIBAL PARTNERS

**S**ubsistence hunters and fishermen are one of the highest risk groups for PBT exposure. Native American tribes are increasingly concerned about the safety of their subsistence resources. Tribes need information that allows them to make choices that balance caution in eating certain subsistence foods with the cultural and spiritual value of these foods. EPA acknowledges the necessity of having tribes participate in decisions about risk communication. Involving Alaskan native villages in determining how to use PBT risk information is important because up to a third of their diet consists of subsistence foods. The Alaskan Arctic (and other parts of the Arctic) serves as an environmental sink for PBT contamination, yet the United States has less PBT monitoring data for Alaska than it has for the lower 48 States.



In addition to furthering partnerships with tribes in order to undertake the tribal risk assessment and risk communication efforts described below, the PBT Program has continued to support activities that communicate risks of PBT exposure to the general population.

For example, as part of an effort to transition into a new, topic-based approach to environmental protection, EPA is conducting a thorough review of the mercury information currently on its Web sites. Mercury information will be clearer and easier to find, with access through a central mercury Web portal. In addition, this process of organizing mercury-related information will be used as a model for communicating important messages about other priority PBTs. During 2001-2002, EPA also continued to work with states to publicize fish consumption advisories and develop guidance on risk communication messages.

### **Developing Different Approaches to Help Tribal Officials Better Safeguard Tribal Traditional Lifeways**

EPA established the National Tribal Subsistence Summit/Tribal Traditional Lifeways Project to increase the ability of tribes to assess environmental threats from toxic chemicals and pesticides, including PBTs and radionuclides, which can be in foods and other materials important to tribal cultures. Tribes are in the best posi-

tion to successfully evaluate and develop an appropriate course of action to address their concerns.

This project will create different approaches to help tribes prioritize, assess, and address these issues as appropriate under EPA's programs. In spring 2003, the National Tribal Environmental Council and the Alaska Native Science Commission will convene a preliminary technical meeting of tribal scientists, environmental directors, and risk assessors to identify lifeways issues and concerns, potential resources, and gaps in data to be used to identify next steps. The approach selected will make maximum use of tribal traditional knowledge so that the overall assessment is cost-effective and culturally appropriate.

### **Analyzing the PBT Content in Traditional Native Alaskan Foods**

During 2001-2002, the PBT Program continued to support a partnership with Alaskan native villages to test and analyze the foods that Native Americans obtain from the wild in Alaska. Members of five Native American communities collected herring gull eggs according to a quality assurance project plan developed by the tribes and approved by EPA. EPA also developed a screening tool to help Alaskan tribes predict, based on a statistical model, the presence or absence of PBTs in gull eggs within Southeast, South Central, and Northwest Alaska. Preliminary analysis of the samples indicates that risk

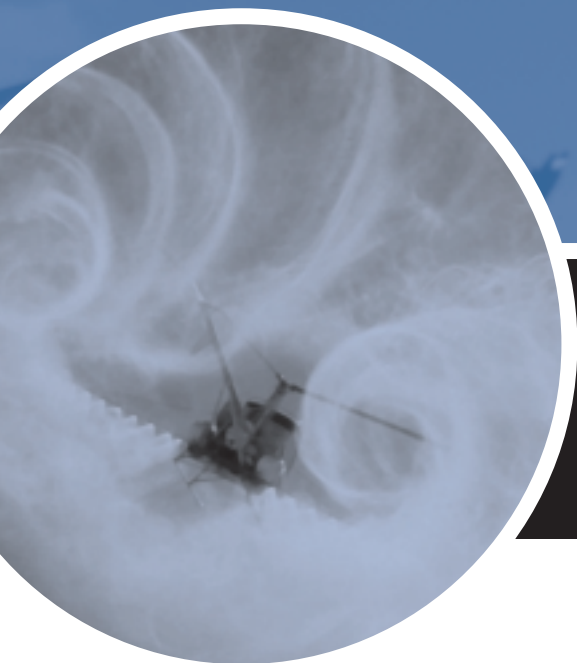


exposure levels for heavy metals, organochlorines/pesticides, and dioxins/furans are minimal. The Alaska Sea Otter and Stellar Sea Lion Commission and Community Field Collectors will hold community meetings to describe the study and explain the risk levels associated with the contaminants analyzed in the gull eggs.

### **Expanding Assessment Tools to Cover the Exposure Risks Specific to Tribal Cultures**

In May 2002, EPA's Office of Pesticide Programs began an effort to modify LifeLine, one of its primary software risk assessment tools, to enable it to capture unique exposure risks that may accompany the practice of traditional tribal cultures and ways of life. In its first year, the tribal LifeLine pilot project will modify existing LifeLine software to allow it to evaluate risks to tribes in two biogeographical areas (BGAs) of the country, one in Alaska and the other in the contiguous 48 states. At the conclusion of this initial phase of the project, EPA risk assessors, tribes, and others will have access to state-of-the-art software that will allow them to assess potentially significant risks from toxic chemical exposures to tribal populations in the two chosen BGAs.





## CHAPTER 6: **COLLABORATIVE EFFORTS ON PBTs WITH INTERNATIONAL PARTNERS**

**T**he long-range atmospheric transport of PBTs has become a pervasive and global problem, one that requires the cooperation of the international community. The United States continues to work with its international partners to resolve problems posed by PBTs locally, regionally, and globally. The following are examples of EPA's collaborative efforts with international partners on PBT issues in 2001-2002:

## Signing the Stockholm Convention on Persistent Organic Pollutants

EPA Administrator Whitman, along with the members of the European Union and 90 other countries, signed the Stockholm Convention on Persistent Organic Pollutants (POPs) on May 23, 2001. This groundbreaking treaty includes measures to reduce and/or eliminate the production, use, and/or release of 12 POPs (see Table 4). The Convention will enter into force once it is ratified by at least 50 countries.

On April 11, 2002, Administrator Whitman submitted the Administration's legislative proposal to Congress to implement the POPs Convention. The package also included provisions to implement the Rotterdam Convention on Prior Informed Consent (PIC) and the Long Range Transport of Air Pollution (LRTAP) POPs Protocol. The Administration is working with the U.S. Congress to ensure approval of the legislation in order for the U.S. to become parties to these important international Conventions as soon as possible to further protection of human health and the environment domestically and globally.

In the spring of 2002, the PBT Program sponsored the publication of a brochure and a technical support document to communicate information to United States audiences regarding the POPs treaty. The brochure, entitled *Persistent Organic Pollutants: A Global Issue, A Global Response*, is a collaborative effort between EPA and major stakeholders, including other federal agencies and groups in Alaska and the Great Lakes. Targeted to the general public, the brochure provides basic information about POPs and the POPs treaty. It also describes global and domestic actions taken by the United States to control POPs and region-specific POP issues.

The technical support document, entitled *The Foundation for Global Action on Persistent Organic Pollutants: A United States Perspective*, was published to inform decision-makers, academia, and the general public about the POPs treaty's scientific foundation and relevance to the United States. This report summarizes data available in the peer-reviewed literature on the 12 POPs

### Table 4. Persistent Organic Pollutants

Aldrin/Dieldrin
Camphechlor (Toxaphene)
Chlordane
Dichlorodiphenyltrichloroethane (DDT)
Dioxins/Furans
Endrin
Heptachlor
Hexachlorobenzene
Mirex
Polychlorinated Biphenyls (PCBs)



and provides an overview of the risks posed to United States ecosystems and the public.

### Assessing Mercury Contamination on a Global Scale

Based on the suggestion of EPA and the Department of State, the United Nations Environment Programme (UNEP) Governing Council decided in February 2001 to conduct a global assessment of mercury. The assessment was completed in collaboration with governments, intergovernmental and non-governmental organizations and the private sector in 2002 and addressed the following:

- Sources, emissions inventories, long-range transport, chemical transformations, and fate of mercury.
- Production and use patterns of mercury as a global commodity.
- Prevention and control technologies and practices, with associated costs and effectiveness.
- Exposures and effects on humans and ecosystems.
- Ongoing actions and plans for controlling releases and limiting use and exposures.
- Options for international action.

In February 2003, the UNEP Governing Council accepted the key findings of the Global Mercury Assessment and agreed on a program for international action on mercury. The UNEP mercury program will assist all countries, especially developing countries and countries with economies in transition, with capacity building activities to characterize their mercury pollution problems and to develop appropriate strategies to mitigate mercury pollution problems.

### PBT Reductions in the Russian Federation

#### DEMONSTRATING THAT SO<sub>2</sub> REDUCTION POLICIES ALSO REDUCE MERCURY EMISSIONS

EPA is supporting a demonstration project to document mercury reduction as a co-benefit of sulfur dioxide (SO<sub>2</sub>) emission control at a small coal-fired power plant outside of Moscow, Russia. In this project, an electrostatic precipitator, which is primarily a particulate matter control device, will be retrofitted with an atomization system through which lime slurry can be injected for SO<sub>2</sub> control. This technology, originally directed solely at SO<sub>2</sub> reduction, will be evaluated for mercury capture and is expected to be a low-cost option with at least 50 percent reduction effectiveness. Speciated mercury measurements will







be taken at the stack and in the ambient environment around the plant as a baseline and following operation of the control technology, which will begin in spring 2003. Efforts are also underway to analyze mercury in Russian coal in support of an emissions inventory.

#### **PERSISTENT ORGANIC POLLUTION REDUCTIONS IN THE RUSSIAN FEDERATION**

The three projects discussed below are implemented under the international Arctic Council Action Plan (ACAP) Program to reduce/eliminate Persistent Organic Pollutants (POPs) in the Arctic. These projects are currently implemented in Russia, but they can be expanded to other countries. They are part of an integrated program to assist Russia to meet the requirements of both the Stockholm Convention and the POPs Protocol of the Long Range Transboundary Air Pollution (LRTAP) Convention.

##### *Phase Out of PCBs in the Russian Federation*

The United States, along with seven other Arctic countries and the United Nations Environment Programme (UNEP) Chemicals, are working to help the Russian Federation expedite PCB phase-out and develop sound PCB management and disposal practices in the Russian Arctic.

This project consists of three phases. The first phase, development of a PCB Inventory for the Russian Federation, was completed in October 2000 and is openly available. The second phase was a Feasibility Study to evaluate alternatives to PCBs, as well as PCB decontamination and destruction technologies. This phase was completed in October 2002. Currently, work has started on Phase 3 to develop a prototype demonstration for destruction of up to 200 tonnes of PCB liquids from electrical transformers and capacitors in Russia.

##### *Reduction of Dioxins and Furans Releases in the Russian Federation*

This is a cooperative project with Sweden, Russia and UNEP Chemicals. The primary objective is the reduction of dioxins/furans releases to the Arctic from key industrial sectors with particular focus on the pulp and paper industry and landfill incinerators.

Initial activities completed include: translation into Russian of the UNEP Chemicals "Standardized Toolkit for Identification and Quantification of Dioxins and Furans Releases"; development of a draft Dioxins/Furans Fact Sheet for use in Russia; and a Workshop on

Harmonization of Laboratory Methods between Russia and Western countries.

The project consists of three phases: Phase I—Identify and verify sources of dioxins and furans in Russia, verify emissions and refine emission factor estimates, and modernize and harmonize Russian sampling and analytical techniques; Phase II—feasibility studies for technological improvements in the pulp and paper industry and industrial incineration; Phase III—pilot demonstration project(s).

#### *Environmentally Safe Management of Obsolete Pesticides Stockpiles in the Russian Federation*

This multilateral project under the Arctic Council Action Plan (ACAP) will assist Russia with management of its extensive stockpiles of Soviet Era pesticides, many of which are migrating into the Arctic. This is a cooperative project with Canada, Finland, Norway, Russia, Sweden, and UNEP Chemicals.

The project consists of three phases: Phase 1—developing the inventory of obsolete pesticide stockpiles in the nineteen priority Russian regions impacting the Arctic; Phase 2—developing a strategy for safe interim storage and stabilization of stockpiles; this will include performing risk assessments for

highest contaminated areas, evaluating destruction technologies, and designing a prototype storage facility that can be used throughout Russia; and Phase 3—implementing a prototype demonstration for environmentally safe destruction of those pesticides stocks of greatest risk to the Arctic, including Alaska, and construction of a prototype storage facility.

#### **Helping Caribbean Nations Inventory PCB-Contaminated Equipment**

In 2001, EPA began a project to assist selected countries in the Caribbean in addressing targeted PCB sources. In 2002, an inventory of PCBs in the Caribbean was completed and the Bahamas was identified as a country with large quantities of PCB-containing equipment. The Caribbean PCB management project will initially involve assisting the Bahamas with a more comprehensive inventory of PCB-containing equipment. Thereafter, a strategy will be developed for the safe disposal, storage, and/or destruction of PCB-containing equipment. This strategy will be developed to be applicable to the Bahamas as well as other Caribbean countries.





## APPENDIX A: RESOURCES

Resource Topic	Location/Contact*
<b>EPA's PBT Program and Priority PBTs</b>	
EPA's PBT Web Site	<a href="http://www.epa.gov/pbt">www.epa.gov/pbt</a>
<b>Dioxins/furans</b>	
Dioxin and Related Compounds	<a href="http://www.epa.gov/ncea/dioxin.htm">www.epa.gov/ncea/dioxin.htm</a>
Enviro Web's Dioxin Home Page	<a href="http://www.ejnet.org/dioxin">www.ejnet.org/dioxin</a>
National Center for Environmental Assessment's Dioxin and Related Compounds	<a href="http://www.epa.gov/ncea/dioxin.htm">www.epa.gov/ncea/dioxin.htm</a>
<b>Mercury</b>	
EPA's Mercury Web Site	<a href="http://www.epa.gov/mercury">www.epa.gov/mercury</a>
EPA's Mercury Research Strategy	<a href="http://www.epa.gov/ORD/NRMRL/mercury">www.epa.gov/ORD/NRMRL/mercury</a>
Northeast Waste Management Officials' Association (NEWMOA) Mercury Program	<a href="http://www.newmoa.org/Newmoa/htdocs/prevention/mercury/">www.newmoa.org/Newmoa/htdocs/prevention/mercury/</a>
UNEP Global Mercury Assessment and Decision	<a href="http://www.chem.unep.ch/mercury/default.htm">www.chem.unep.ch/mercury/default.htm</a>
Binational Toxics Strategy Mercury Work Group (EPA Region 5)	<a href="http://www.epa.gov/region5/air/mercury/mercury.html">www.epa.gov/region5/air/mercury/mercury.html</a>
Florida Department of Environmental Protection's Mercury Web site	<a href="http://www.dep.state.fl.us/air/pollutants/mercury.htm">www.dep.state.fl.us/air/pollutants/mercury.htm</a>
<b>PCBs</b>	
EPA's Office of Pollution Prevention and Toxics (OPPT) PCB Home Page	<a href="http://www.epa.gov/oppt/pcb">www.epa.gov/oppt/pcb</a>
Polychlorinated Biphenyls (PCBs) Databases and Forms	<a href="http://www.epa.gov/opptintr/pcb/data.html">www.epa.gov/opptintr/pcb/data.html</a>

\* This is only a partial listing of available resources. The listing of non-EPA Web sites does not constitute an endorsement by EPA or its partners.

## Achieving Pollution Reductions

### Pollution Prevention

TSCA Chemical Substance Inventory	<a href="http://www.epa.gov/opptintr/newchems/invntory.htm">www.epa.gov/opptintr/newchems/invntory.htm</a>
PBT Profiler	<a href="http://www.pbtprofiler.net/">www.pbtprofiler.net/</a>
Mercury Education and Reduction Model Act	<a href="http://www.newmoa.org/prevention/mercury/final_model_legislation.htm">www.newmoa.org/prevention/mercury/final_model_legislation.htm</a>
Hospitals for a Healthy Environment	<a href="http://www.h2e-online.org">www.h2e-online.org</a>
Sector-Based Pollution Prevention: Toxic Reductions through Energy Efficiency and Conservation Among Industrial Boilers	<a href="http://delta-institute.org/publications/boilers/Sector-Based_Pollution%20Prevention_-_Toxic_Reductions_through_Energy_Efficiency_and_Conservation_Among_Industrial_Boilers.pdf">delta-institute.org/publications/boilers/Sector-Based_Pollution%20Prevention_-_Toxic_Reductions_through_Energy_Efficiency_and_Conservation_Among_Industrial_Boilers.pdf</a>
2001 Chlorine Institute Annual Meeting Presentations	<a href="http://www.cl2.com/AM2001/">www.cl2.com/AM2001/</a>
Chlorine Institute's 4th annual report to EPA	<a href="http://www.epa.gov/region5/air/mercury/4thcl2report.html">www.epa.gov/region5/air/mercury/4thcl2report.html</a>
Reducing Open Burning of Household Trash	Douglas Fairchild at 218 722-3336, Ext. 334, <a href="mailto:doug.fairchild@wlssd.duluth.mn.us">doug.fairchild@wlssd.duluth.mn.us</a>

### Controlling PBT Releases to the Environment

Taking Toxics Out of the Air: Progress in Setting "Maximum Achievable Control Technology" Standards Under the Clean Air Act	<a href="http://www.epa.gov/oar/oaqps/takingtoxics">www.epa.gov/oar/oaqps/takingtoxics</a>
Reducing Mercury from Power Plants: Integrated Planning Model	Maryjo Krolewski at 202 564-9847, <a href="mailto:krolewski.maryjo@epa.gov">krolewski.maryjo@epa.gov</a> or <a href="http://www.epa.gov/airmarkets/epa-ipm/index.html">www.epa.gov/airmarkets/epa-ipm/index.html</a>
Field Testing of Continuous Emission Monitors	Bill Grimley at 919 541-1065, <a href="mailto:grimley.william@epa.gov">grimley.william@epa.gov</a>
Coal Combustion Residues – Mercury in Fly Ash	Susan Thorneloe at 919 541-2709, <a href="mailto:thorneloe.susan@epa.gov">thorneloe.susan@epa.gov</a>
Results of analysis of MACT retrofits on large municipal waste combustors, EPA Docket A-90-45, under Section VIII-B.	<a href="http://www.epa.gov/oar/docket.html">www.epa.gov/oar/docket.html</a> or 202 566-1742
Rules for Municipal Waste Combustors	Walt Stevenson at 919 541-5264, <a href="mailto:stevenson.walt@epa.gov">stevenson.walt@epa.gov</a>
Rules for Medical Waste Incinerators	Fred Porter at 919 541-5251 or <a href="mailto:porter.fred@epa.gov">porter.fred@epa.gov</a>
Rules for Cement Kilns Burning Hazardous Waste	<a href="http://www.epa.gov/hwcmact">www.epa.gov/hwcmact</a>
Technology Transfer Network Air Toxics Website	<a href="http://www.epa.gov/ttn/atw">www.epa.gov/ttn/atw</a>
Mercury in Schools	<a href="http://www.mercuryinschools.uwex.edu/">www.mercuryinschools.uwex.edu/</a>
Pressure Gauge Safety for Plumbers	<a href="http://www.dec.state.ny.us/website/ppu/p2plumbr.html">www.dec.state.ny.us/website/ppu/p2plumbr.html</a>
Mercury in Federal Facilities	<a href="http://www.newmoa.org">www.newmoa.org</a>
Breaking the Mercury Cycle: Long Term Management of Surplus & Recycled Mercury & Mercury-bearing Waste	<a href="http://www.epa.gov/ttnrmrl/mercuryretire.htm">www.epa.gov/ttnrmrl/mercuryretire.htm</a>

Alternative Treatments for Mercury Waste	Mary Cunningham at 703 308-8453, <a href="mailto:cunningham.mary@epa.gov">cunningham.mary@epa.gov</a>
Partnering with Industry to Eliminate PCBs	Tony Martig at 312 353-2291, <a href="mailto:martig.anton@epa.gov">martig.anton@epa.gov</a>
Phaseout of PCBs Electrical Equipment in Mines	Dan Bench at 303 312-6027, <a href="mailto:bench.dan@epa.gov">bench.dan@epa.gov</a>
Removing Pesticides From the Environment	<a href="http://www.epa.gov/pesticides">www.epa.gov/pesticides</a>
The Clean Sweep Report	<a href="http://www.epa.gov/oppfeed1/cb/csb_page/updates/cleansweep.pdf">www.epa.gov/oppfeed1/cb/csb_page/updates/cleansweep.pdf</a>
<b>Filling the PBT Data Gaps</b>	
EPA's Toxic Release Inventory home page	<a href="http://www.epa.gov/tri">www.epa.gov/tri</a>
Persistent, Bioaccumulative, and Toxic (PBT) Chemicals Rules	<a href="http://www.epa.gov/tri/lawsandregs/pbt/pbtrule.htm">www.epa.gov/tri/lawsandregs/pbt/pbtrule.htm</a>
Atmospheric Mercury Research	Matthew Landis at 919 541-4841, <a href="mailto:landis.matthew@epa.gov">landis.matthew@epa.gov</a>
Addressing the Relationship Between Mercury Air Emissions and Water Quality	Ruth Chemerys at 202 566-1216, <a href="mailto:chemerys.ruth@epa.gov">chemerys.ruth@epa.gov</a> or Randy Waite at 919 541-5447, <a href="mailto:waite.randy@epa.gov">waite.randy@epa.gov</a>
Determining the Routes by Which Mercury Pollutes the Everglades	John Ackermann at 404 562-9063 or <a href="mailto:ackermann.john@epa.gov">ackermann.john@epa.gov</a>
Total Maximum Daily Loads	<a href="http://www.epa.gov/owow/tmdl">www.epa.gov/owow/tmdl</a>
Blood and Hair Mercury Levels in Young Children and Women of Childbearing Age— United States, 1999	<a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5008a2.htm">www.cdc.gov/mmwr/preview/mmwrhtml/mm5008a2.htm</a>
National Health and Nutrition Examination Survey	<a href="http://www.cdc.gov/nchs/nhanes.htm">www.cdc.gov/nchs/nhanes.htm</a>
Measuring Heavy Metals and POPs Levels in Fetal Cord Blood Samples Taken from Indigenous Peoples in Alaska, Northern Russia and the Russian Far East	Ella Barnes at 202 564-6473, <a href="mailto:barnes.eleonora@epa.gov">barnes.eleonora@epa.gov</a> Bob Dyer at 202 564-6113, <a href="mailto:dyer.bob@epa.gov">dyer.bob@epa.gov</a> Cathy Allen at 202 564-6115, <a href="mailto:Catherine.Allen@epa.gov">Catherine.Allen@epa.gov</a>
National Fish Tissue Study	Leanne Stahl at 202 566-0404, <a href="mailto:stahl.leanne@epa.gov">stahl.leanne@epa.gov</a>
PBTs in the U.S. Dairy Supply	John Schaum at 202 564-3237 or <a href="mailto:schaum.john@epa.gov">schaum.john@epa.gov</a>
Dioxin Exposure Initiative	Dwain Winters at 202 566-1977 or <a href="mailto:winters.dwain@epa.gov">winters.dwain@epa.gov</a>
<b>Collaborative Efforts on PBTs with Tribal Partners</b>	
National Tribal Subsistence Summit Project	Darlene Harrod at 202 564-8814, <a href="mailto:harrod.darlene@epa.gov">harrod.darlene@epa.gov</a>
Tribal LifeLine Risk Assessment Project	Karen Rudek at 703 305-6005, <a href="mailto:rudek.karen@epa.gov">rudek.karen@epa.gov</a>
Analyzing the PBT Content in Traditional Foods of Native Alaskans: The Alaska Sea Otter and Stellar Sea Lion Commission	Lianna Jack at 800 474-6342, <a href="mailto:asoc@alaska.net">asoc@alaska.net</a>
Measuring Heavy Metals and POPs Levels in Fetal Cord Blood Samples Taken from Indigenous Peoples in Alaska, Northern Russia and the Russian Far East	Ella Barnes at 202 564-6473, <a href="mailto:barnes.eleonora@epa.gov">barnes.eleonora@epa.gov</a> Bob Dyer at 202 564-6113, <a href="mailto:dyer.bob@epa.gov">dyer.bob@epa.gov</a> Cathy Allen at 202 564-6115, <a href="mailto:Catherine.Allen@epa.gov">Catherine.Allen@epa.gov</a>

## Collaborative Efforts on PBTs with International Partners

The Foundation for Global Action on Persistent Organic Pollutants: A United States Perspective	<a href="http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=51746">http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=51746</a>
United Nations Environmental Programme Chemicals	<a href="http://www.chem.unep.ch/pops">www.chem.unep.ch/pops</a> and <a href="http://www.chem.unep.ch/mercury">www.chem.unep.ch/mercury</a>
Persistent Organic Pollutants	<a href="http://www.epa.gov/international/toxics/pop.pdf">www.epa.gov/international/toxics/pop.pdf</a>
Stockholm Convention on POPs	<a href="http://www.chem.unep.ch/sc/">www.chem.unep.ch/sc/</a>
Mercury/SO <sub>2</sub> Co-Benefit Project	Marilyn Engle at 202 564-6472 or <a href="mailto:engle.marilyn@epa.gov">engle.marilyn@epa.gov</a>
Russian Phase-out of PCBs	Bob Dyer at 202 564-6113, <a href="mailto:dyer.bob@epa.gov">dyer.bob@epa.gov</a> Ella Barnes at 202 564-6473, <a href="mailto:barnes.eleonora@epa.gov">barnes.eleonora@epa.gov</a> Seth Low at 703 603-9087, <a href="mailto:low.seth@epa.gov">low.seth@epa.gov</a>
Reductions of Dioxins/Furans Releases in Russia	Ella Barnes at 202 564-6473, <a href="mailto:barnes.eleonora@epa.gov">barnes.eleonora@epa.gov</a> Bob Dyer at 202 564-6113, <a href="mailto:dyer.bob@epa.gov">dyer.bob@epa.gov</a> Seth Low at 703 603-9087, <a href="mailto:low.seth@epa.gov">low.seth@epa.gov</a>
Environmentally Safe Management of Obsolete Pesticide Stockpiles in the Russian Federation	Bob Dyer at 202 564-6113, <a href="mailto:dyer.bob@epa.gov">dyer.bob@epa.gov</a> Ella Barnes at 202 564-6473, <a href="mailto:barnes.eleonora@epa.gov">barnes.eleonora@epa.gov</a>
Carribean Inventory of PCBs	Angela Bandemehr at 202 564-1427, <a href="mailto:bandemehr.angela@epa.gov">bandemehr.angela@epa.gov</a>

## APPENDIX B: FUTURE OUTLOOK

Future activities that build on projects disclosed in this report include:

### Developing Strategies for Addressing PBTs

- Completing the Multimedia Strategy for Addressing Priority PBTs.
- Releasing the draft National Action Plans for Mercury, PCBs, and Benzo(a)Pyrene.
- Releasing an EPA Strategy on Dioxin.
- Publishing the final National Action Plans for Pesticides, Hexachlorobenzene, and Octachlorostyrene.

### Achieving Pollution Reductions

- Developing a policy to strengthen the process by which EPA screens new pesticides prior to their production and introduction to the marketplace.
- Working with the National Association for Stock Car Automobile Racing (NASCAR), the FAA, and others to identify substitutes for alkyl-lead compounds in fuels.
- Holding a workshop in the Western Lake Superior Sanitary District to develop models for local anti-open burning campaigns, including legal and enforcement issues, and to develop curriculum models for environmental science teachers.
- Continuing to evaluate continuous emission monitors for mercury on power plants. At least two power plants that

employ extensive particulate and sulfur dioxide control technology will be employed in this work.

- Upgrading the Integrated Planning Model (IPM)—used to analyze regulatory options for reducing mercury emissions from power plants—based on initial results and stakeholder comments. EPA will also continue to field test continuous emission monitors for mercury at power plants.
- Analyzing the potential rates at which mercury and other metals are released to the environment when the residue from coal combustion is used in commercial products, like cement and wallboard. EPA will also study the potential for releases of mercury and other metals from the products during their use and disposal.
- Implementing standards for PBT emissions from small municipal waste combustors by December 2005.
- Encouraging federal owners of PCB-containing electrical equipment to voluntarily decommission this equipment.
- Expanding the PCB partnership with utilities to include additional facilities within the Great Lakes region. The partnership seeks voluntary commitments from utilities to decommission their remaining PCB electrical equipment.

### Filling the PBT Data Gaps

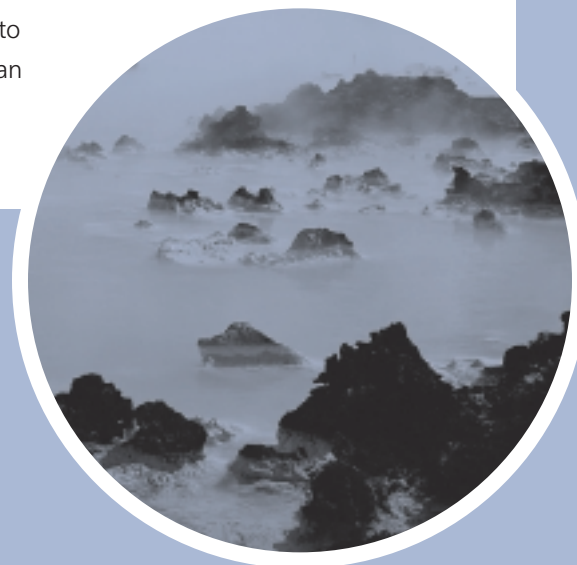
- Completing the Routine Monitoring Strategy for PBTs.
- Releasing findings from studies in Wisconsin and Florida on the relationship between mercury air emissions and water quality.
- Continuing to measure heavy metals and POPs levels in fetal cord blood samples taken from indigenous peoples in Alaska, Northern Russia and the Russian Far East.
- Continuing the National Fish Tissue Study. The 4-year goal for the study is to sample a total of 500 lakes. Once the study is completed, the data will be made available to the public through EPA's Storage and Retrieval (STORET) database system.
- Continuing the Dioxin Exposure Initiative.

### Collaborating with Tribal Partners

- Developing different approaches to increase the ability of tribes to assess environmental threats from toxic chemicals and pesticides.
- Holding meetings in Alaskan tribal communities to describe the tribal herring gull eggs study and explain the risk levels associated with the contaminants analyzed in the gull eggs.
- Modifying existing LifeLine software to allow it to capture risks to tribes in two biogeographical areas (BGAs) of the country, one in Alaska and the other in the contiguous 48 states. This will allow EPA risk assessors, tribes, and others to assess potentially significant risks from toxic chemical exposures to tribal populations in the two chosen BGAs.

### Collaborating with International Partners

- Working with UNEP to help implement the February 2003 Governing Council Decision on Mercury.
- Testing control technology that could lead to reductions in both mercury and SO<sub>2</sub> at a coal-fired power plant in Russia.
- Developing a prototype demonstration for destruction of up to 200 tonnes of PCB liquids from electrical transformers and capacitors in Russia.
- Working to reduce dioxins/furans releases to the Arctic from key industrial sectors in the Russian Federation, with particular focus on the pulp and paper industry and landfill incinerators.
- Assisting Russia with the management of its obsolete pesticides stockpiles.
- Assisting the Bahamas with a more comprehensive inventory of PCB-containing equipment and developing a strategy for the safe disposal, storage, and/or destruction of PCB-containing equipment, which can be applicable to other Caribbean countries.





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- Office of Prevention, Pesticides, and Toxic Substances (co-chair)
- Office of Solid Waste and Emergency Response (co-chair)
- Office of Air and Radiation
- Office of Enforcement and Compliance Assurance
- Office of Environmental Information
- Office of International Affairs
- Office of Research and Development
- Office of Water
- Office of Policy, Economics, and Innovation
- The Great Lakes National Program Office
- The 10 EPA Regions

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